<u>DIAGNOSTIC ULTRASONIC IMAGING SYSTEM HAVING COMBINED SCANHEAD</u> <u>CONNECTIONS</u>

ABSTRACT OF THE DISCLOSURE

A diagnostic ultrasonic imaging system includes a scanhead having a plurality of transducer elements. A signal combiner, such a time-division multiplexer or a frequency-division multiplexer, is coupled to each of the transducer elements. The signal combiner combines the signals from the transducer elements into a composite signal and couples the composite signal to an ultrasonic processor through a wire or other communication link. A signal separator, such as a time-division demultiplexer or a frequency-division demultiplexer, is coupled to the link and recovers from the composite signal each of the signals from the transducer elements.

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